UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/595,960	05/22/2006	Kenjiro Ueda	112857-767	9679

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EXAMINER
SQUIRES, BRETT S

ART UNIT	PAPER NUMBER
2431	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/595,960	UEDA ET AL.
	Examiner	Art Unit	
	BRETT SQUIRES	2431	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 May 2006*.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-38* is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1-38* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☒ The drawing(s) filed on *22 May 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a)☐ All   b)☐ Some * c)☒ None of:
  1.☒ Certified copies of the priority documents have been received.
  2.☐ Certified copies of the priority documents have been received in Application No. _____ .
  3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
  Paper No(s)/Mail Date *05/22/06*.

4) ☐ Interview Summary (PTO-413)
  Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____ .

Priority

1.   Acknowledgment is made of applicant's claim for foreign priority based on an

application filed in Japan on December 7, 2004. It is noted, however, that applicant has

not filed a certified copy of the JP 2004-353637 application as required by 35

U.S.C. 119(b).

Claim Rejections - 35 USC § 112

2.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

3.   Claims 9, 18, 27, 33 and 34 are rejected under 35 U.S.C. 112, second

paragraph, as being indefinite for failing to particularly point out and distinctly claim the

subject matter which applicant regards as the invention.

4.   Claim 9 recites the limitation "the MPEG encoded data" in page 97 line 5. Claim

18 recites the limitation "the MPEG encoded data" in page 100 line 6. Claim 27 recites

the limitation "the MPEG encoded data" in page 103 line 23. Claim 34 recites the

limitation "the MPEG encoded data" in page 106 line 2. There is insufficient antecedent

basis for this limitation in the claims.

5.   Claims 9, 18, 27, and 34 recite the improper Markush Group of "data which

includes at least one of the following: (1) a portion of I-picture slice encoded data

included in the MPEG encoded data, (2) a portion of the sequence header, and (3) PID

data storing the data-type information within the transport stream packet." The use of

"includes" when claiming a Markush Group is improper because "includes" allows for

inclusion of additional unrecited elements, and therefore renders the Markush Group

indefinite. Appropriate correction is required.

6.   Claim 33 recites the limitation "the encrypting processing in CBC mode which

executes with data," in page 105 lines 18-19. There is insufficient antecedent basis for

this limitation in the claim.

Claim Rejections - 35 USC § 101

7.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

8.   Claims 37-38 are rejected under 35 U.S.C. 101 because the claimed invention is

directed to non-statutory subject matter. Claim 37 recites "a computer program for

executing content recording processing to an information recording medium," this

recitation is functional descriptive material and does not fall into at least one of the four

statutory classes defined by 35 U.S.C. 101. Claim 38 recites "a computer program for

executing playback processing of the content recorded on the information recording

medium," this recitation is functional descriptive material and does not fall into at least

one of the four statutory classes defined by 35 U.S.C. 101. A computer program, such

as the recited program for executing content processing and the program executing

playback processing, only impart functionality when employed as a computer

component, such as when a computer program is recorded on a computer readable

medium. If a claim covers material not found in any of those four categories, then the

claim falls outside the plainly expressed scope of 35 U.S.C. 101, even if the subject

matter is otherwise new and useful. *See In re Nuijten 84 USPQ2d 1495 (Fed. Cir.*

2007)

Claim Rejections - 35 USC § 102

9.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10.   Claims 1-2, 4, 7-11, 13, 16-20, 22, 25-28, 30,and 33-38 are rejected under 35

U.S.C. 102(b) as being anticipated by Markandey et al. (US 6,526,144).

Regarding Claims 1, 10, 19, 28, and 35:

Markandey discloses a data protection system for PC equipment having a

scramble rule acquiring step for acquiring a scramble rule ("Scramble Pattern" See col.

10 lines 22-43) to apply to the content to be recorded on the information recording

medium ("Compressed data to be stored on DVD is subjected to a scrambling process

and then stored in the scrambled order on the DVD." See col. 10 lines 22-30), a

scrambling processing step for executing the scrambling processing as to the content

according to the scramble rule acquired in the scramble rule acquiring step ("Data

corresponding to each pack is scrambled by interchanging the order of the various

digital bits according to a scramble pattern." See col. 10 lines 22-30), and a step for

recording the scrambled content generated in the scrambling processing step and the

scramble rule applied to the content onto an information recording medium ("The

package medium further comprises a plurality of machine-readable scramble codes and

each of the plurality of machine-readable scramble codes corresponds to one of the

plurality of data quantities and indicates a manner of descrambling the corresponding

one of the plurality of data quantities." See col. 2 lines 22-31).

Regarding Claims 2, 11, 20, and 36-38:

Markandey discloses the scramble rule acquiring step is a step for acquiring

individual scramble rules for each recording content or for each management unit in the

event of a plurality of content to be recorded to the information recording medium ("The

package medium further comprises a plurality of machine-readable scramble codes and

each of the plurality of machine-readable scramble codes corresponds to one of the

plurality of data quantities and indicates a manner of descrambling the corresponding

one of the plurality of data quantities." See col. 2 lines 22-31).

Regarding Claims 4, 13, 22, and 30:

Markandey discloses the scrambling processing executed in the scrambling

processing step is shuffling processing of shuffle elements which are set as content-

comprising data ("The output bit order illustrates a corresponding scramble pattern

showing how the customary ordering is re-arranged in a different order." See col. 10

lines 31-65) and wherein the scramble rule is data which describes the shuffle state of

the shuffle elements ("Scramble Pattern" See col. 10 lines 31-43).

Regarding Claims 7, 16, 25, and 33:

Markandey discloses an encrypting processing step for executing encrypting

processing of the recorded content of the information recording medium, after executing

the scrambling processing step, or before executing the same ("Cryptography

techniques such as Data Encryption Standard and Diffie-Hellman Key Exchange

algorithms may be nested with data scrambling." See col. 3 lines13-39).

Regarding Claims 8, 17, and 26:

Markandey discloses the scrambling processing executed in the scrambling

processing step is a shuffling processing of the shuffled elements which are set as

content-comprising data ("The output bit order illustrates a corresponding scramble

pattern showing how the customary ordering is re-arranged in a different order." See

col. 10 lines 31-65) and wherein the encrypting processing executed in the encrypting

processing step is encrypting processing in CBC mode executed on data units the same

size as that of the shuffled elements ("Data encryption is performed using DES to

encrypt 64-bit blocks in CBC mode." See col. 4 lines 4-16 and "The scramble pattern

can be for m bits of data." See col. 11 lines 4-6).

Regarding Claims 9, 18, 27, and 34:

Markandey discloses the data for processing which is executed in the scrambling

processing in the scrambling processing step is data which includes at least one of the

following: a portion of I-picture slice encoded data included in the MPEG encoded data

("The data protection system carries MPEG-2 transport packet video data." See col. 5

lines 55-67), a portion of the sequence header ("The formatted data stream comprises a

plurality of headers." See col. 2 lines 6-21), and PID data storing the data-type

information within the transport stream packet ("The format ID value for MPEG transport

stream." See col. 6 lines 4-15).

11.   Claims 1, 9-10, 18-19, 27-28, and 34-35 are rejected under 35 U.S.C. 102(b) as

being anticipated by Ishibashi (US 6,021,199).

Regarding Claims 1, 10, 19, 28, and 35:

Ishibashi discloses a motion picture data encrypting method having a scramble

rule acquiring step for acquiring a scramble rule ("The scramble data represents the

calculation rule of scramble processing performed for the I-picture" See col. 4 lines 57-

59)) to apply to the content to be recorded on the information recording medium, a

scrambling processing step for executing the scrambling processing as to the content

according to the scramble rule acquired in the scramble rule acquiring step (The I-

picture is scrambled by a predetermined calculation rule." See col. 4 lines 10-12), and a

step for recording the scrambled content generated in the scrambling processing step

and the scramble rule applied to the content onto an information recording medium

("Scramble Data" and "Scrambled I-picture" See figs. 2 and 3).

Regarding Claims 9, 18, 2, and 34:

Ishibashi discloses the data for processing which is executed in the scrambling

processing in the scrambling processing step is data which includes at least one of the

following: a portion of I-picture slice encoded data included in the MPEG encoded data

("The I-picture is subjected to encryption such as scramble processing." See col. 3 lines

4-5), a portion of the sequence header ("The stream header portion includes scramble

data representing the location of the scrambled image data." See col. 4 lines 12-17),

and PID data storing the data-type information within the transport stream packet.

12.   Claims 1, 3, 5-6, 10, 12, 14-15, 19, 21, 23-24, 28-29, 31-32, and 35-38 are

rejected under 35 U.S.C. 102(b) as being anticipated by Yorke-Smith (US 5,548,648).

Regarding Claims 1, 10, 19, 28, and 35-38:

Yorke-Smith discloses a data encrypting method having a scramble rule

acquiring step for acquiring a scramble rule ("Control block containing Encryption Key

K" See col. 3 lines 25-42 and col. 6 lines 31-35) to apply to the content to be recorded

on the information recording medium ("A disc drive having means for writing a record

containing the encrypted data to an encrypted data file." See fig. 7 ref. no. DD and col. 6

lines 16-31), a scrambling processing step for executing the scrambling processing as

to the content according to the scramble rule acquired in the scramble rule acquiring

step ("The encryption function in conjunction with an encryption key translates each

byte of the data segment into a corresponding encrypted byte" See col. 3 lines 55-65),

and a step for recording the scrambled content generated in the scrambling processing

step and the scramble rule applied to the content onto an information recording medium

("The encryption key used to encrypt the data is provided within a control block." See

col. 2 lines 29-36 and "The encrypted data comprises a control block and an encrypted

data block. A disc drive having means for writing a record containing the encrypted

data to an encrypted data file." See fig. 7 ref. no. DD and col. 6 lines 16-31).

Regarding Claims 3, 12, 21, and 29:

Yorke-Smith discloses the scrambling processing step is a step for performing

processing to replace at least one portion of the content data to be recorded to the

information recording medium ("The disc drive contains a storage medium storing a file

containing data to be encrypted." See col. 6 lines 15-19) and wherein the scramble rule

includes data which points to the position to which the content data is to be replaced

("The control block contains the values S and L2 used to identify the encrypted data

segment." See col. 5 lines 31-35).

Regarding Claims 5, 14, 23, and 31:

Yorke-Smith discloses the scrambling processing executed in the scrambling

processing step is exclusive-or computing processing of the content-comprising data

and a previously set settings value ("A second random number from a second

predetermined range to select an encryption key." See col. 4 lines 23-31) or a value

calculated based on this settings value, and wherein the scramble rule is data

describing the settings value ("Encrypted Data Segment = K exclusive-or D" See col. 3

line 63).

Regarding Claims 6, 15, 24, and 32:

Yorke-Smith discloses the scrambling processing executed in the scrambling

processing step is a rotating processing of the content-comprising data, and wherein the

scramble rule is data describing a shift amount in the rotation ("Encrypted Data

Segment = shift left data by K bits" See col. 3 lines 64).

13.   Claim 28 is rejected under 35 U.S.C. 102(b) as being anticipated by Shunichi et

al. (GB 2304009 A).

Shunichi discloses an information recording medium ("Recording Medium" See

page 7 lines 19-32) for storing recorded data ("A plurality of signals" See page 7 lines

19-32) as scrambled content having scrambling processing executed according to a

scramble rule set for each recording content or for every management unit ("Each of

said plurality of signals scrambled by a respective one of a plurality of different scramble

data," See page 7 lines 19-32) and the scramble rule applied to the scrambled content

("Recording said plurality of signal scrambled each by a respective one of said plurality

of different scramble data on a recording medium," See page 7 lines 19-32).

Conclusion

14.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to BRETT SQUIRES whose telephone number is (571)

272-8021. The examiner can normally be reached on 9:30am - 6:00pm Monday -

Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BS/

/Christopher A. Revak/
Primary Examiner, Art Unit 2431